Boldly Going Where Others Have Gone Before


Reviewed by Jeffrey C. Stier

Forest economists have not yet reached the stage of diminishing returns in identifying topics for further research. At least that is the impression one gets from the more than 100 “strategic directions” and more than 300 individual research topics identified by the volume’s 31 authors in this, the fourth such review of the field over the past 50 years and the third since 1953. The editor makes no attempt to attach priorities to the individual research areas identified, and the 20 research directions that are listed in the concluding chapter are broadly defined. Consequently, the book presents a large and varied research menu rather than a set of “strategic directions” for future research. Readers will have to decide for themselves the relative importance of the individual topics, but perhaps that is as it should be.

Since the beginning of this century, the United States has gone from a Nation in which the forest industry exploited a mature timber resource, and for which the main determinants of timber supply were the costs of harvesting and transportation, to a situation in which timber must be grown as a crop with all the associated production costs. This transition has increased the need for more efficient timber production. However, most of the past three decades have also witnessed an enormous growth in the public’s demand for noncommodity outputs from forests, ranging all the way from traditional forms of recreation to the more recent emphasis on protection of biodiversity. And, superimposed on these changes have been the increasing importance of international economic linkages. All of these changes have resulted in greater demand for forest economics and policy research.

The first part of the book examines the historical, institutional, and investment context of forest economics and policy research. Ellefson’s chapter examines the research infrastructure in terms of numbers of scientists and projects, and explores the changes in level and allocation of investment in research over time and by agency. The discussion of changes in funding levels, however, is somewhat difficult to follow because Ellefson never states explicitly whether the data reported in the tables are in constant or current dollars. A helpful strategy would have included the discussion of what agencies conduct forest research and how such research is coordinated at the national level before launching into the details of the research infrastructure. Instead, the reader is enlightened two chapters later, and the intervening chapter on research evaluation and planning seems totally out of context (It is interesting to note that Larry Tombaugh’s call for competitive funding of forest economics and policy research is echoed in the National Research Council’s recent report *Forestry Research: A Mandate for Change* (National Academy Press, Washington, DC, 1990).

The second part of the book consists of 20 chapters, each of which deals with a specific area within forestry. The chapter on institutional arrangements for directing the use and management of forests by Perry Hagenstein should especially interest resource economists. He calls attention to the long-term changes in the nature of property rights and the need for the research community to keep both public and private landowners abreast of the implications of such changes. Forest economists have given only modest attention to evaluation of existing institutions and even less to anticipatory research on the development of new and imaginative institutional alternatives. Yet, the future will likely be characterized by increased emphasis on management of forests as ecosystems, by greater recognition of the interrelationships between forest and agricultural lands, and by incorporation of principles of landscape management into resource conservation and development policies. The marginal value of research in this area would seem to be very high indeed.

An institutional factor that has long irked foresters is the *ad valorem* property tax. Objections to the property tax go back to 1819, when Governor Walcott of Connecticut pointed out that owners of forestland must pay the tax for many years but receive income only when they harvest trees. In the early part of this century, F.R. Fairchild’s theoretical analysis confirmed the bias of the property tax against capital-intensive, long-maturity enterprises like forestry. The argument has become so well entrenched in the forestry community that virtually every State has an alternative to *ad valorem* taxation of forestlands. Yet, as David Klemperer points out in his chapter on taxes and forestry, there has been almost no empirical research to determine the effectiveness of these alternative programs in promoting sound forestry practices, the administrative costs they impose on local and State governments, or the distribution of benefits.

The situation is much the same for research on the income tax. The nature of timber production is such that many costs must be paid in advance of the
receipt of income. Revenue from timber sales can qualify for capital gains treatment, but the Tax Reform Act of 1986 removed the principal advantage of such treatment. Advocates of capital gains for timber sale income noted that their arguments were damaged severely by the absence of any credible empirical research on the impact of the capital gains on forest management decisions. Past research has typically been based on analytical models or simulation exercises. But as Klemperer points out, if research is to have policy relevance, there is a strong need to document empirically the effects of income tax provisions on forest management decisions.

The chapter on forecasting demand and supply of forest resources, products, and services focuses almost exclusively on timber. It provides a good overview of recent equilibrium market models developed in the United States and a brief discussion of work in other countries and by international agencies. This is one of the few instances in which forest economics and policy research outside the United States is recognized. The discussion of the market models is surprisingly frank. For example, Clark Row, readily admits that data deficiencies are frequently overcome through the use of “expert judgment” and that model validation is often ad hoc and judgmental, frequently being based largely upon the credibility of the projected scenarios. Data are even more limiting at the subregional level. Yet, as Henry Webster and Daniel Chappelle discuss in their chapter on community and regional economic growth and development, such data are crucial for formulation of rational policies.

Readers with a careful eye and the patience to wade through the entire book will detect a number of interconnecting threads that could lead to some quite interesting research questions. For example, Jay O’Laughlin notes in his chapter on industrial organization that changes in the ownership of firms can influence the structure and performance of the forest products industry. But, might not changes in ownership also have implications for community stability, as well as for the pattern of forest-based regional economic development, and even for international trade flows? O’Laughlin does not raise these questions. Yet, they have rarely been addressed by past research, and answers to them would seem to be important in the formulation of economic development strategies and antitrust policies.

The book has its shortcomings, including an annoying number of grammatical errors. The organization and coverage of topics are uneven. For example, four chapters deal directly with timber, that is, with production and harvesting of wood fiber, management and protection against fire, insects, and diseases, and marketing of forest products. However, they are not grouped together. Production and valuation of recreation and water are each accorded a chapter, but neither wildlife nor range is given separatetreatment. A chapter is devoted to nonindustrial forests but none to other ownerships.

The main audience for this book will be the community of forest economics and policy researchers, but I doubt that many will read it from cover to cover. The most

useful approach for current researchers and for those outside this community would probably be to focus on selected chapters that cover topics of special interest. The book nevertheless serves as a useful fourth benchmark in the evolution of forest economics and policy research.

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